

**WHAT IS CLAIMED IS:**

1. An IP network system comprising:

an IP-PBX as an exchange compliant with an IP network;

an IP terminal device managed by the IP-PBX for performing communication over a PBX protocol defined by the IP-PBX;

5 an H.323 terminal device for performing communication over an H.323 protocol; and

an H.323 gatekeeper managing the H.323 terminal device over the H.323 protocol for performing protocol conversion between the PBX protocol and the H.323 protocol, wherein:

10 the IP-PBX, the IP terminal device, the H.323 terminal device and the H.323 gatekeeper are connected to the same IP network.

2. An IP network system comprising:

an IP-PBX as an exchange compliant with an IP network;

an IP terminal device managed by the IP-PBX for performing communication over a PBX protocol defined by the IP-PBX;

5 an H.323 terminal device for performing communication over an H.323 protocol; and

an H.323 gatekeeper managing the H.323 terminal device over the H.323 protocol for performing protocol conversion between the PBX protocol and the H.323 protocol, wherein:

10 the IP-PBX, the IP terminal device, the H.323 terminal device and the H.323 gatekeeper are connected to the same IP network; and the IP terminal device is a wireless base station.

3. An IP network system comprising:

an IP-PBX as an exchange compliant with an IP network;

an IP terminal device managed by the IP-PBX for performing communication over a PBX protocol defined by the IP-PBX;

5           an H.323 terminal device for performing communication over  
an H.323 protocol; and

          an H.323 gatekeeper managing the H.323 terminal device over  
the H.323 protocol for performing protocol conversion between the PBX  
protocol and the H.323 protocol, wherein:

10           the IP-PBX, the IP terminal device, the H.323 terminal device  
and the H.323 gatekeeper are connected to the same IP network; and

          the H323 terminal device deals with supplemental service  
functions compliant with H450 by the ITU-T recommendation.

4.   An IP network system comprising:

          an IP-PBX as an exchange compliant with an IP network;

          an IP terminal device managed by the IP-PBX for performing  
communication over a PBX protocol defined by the IP-PBX;

5           an H.323 terminal device for performing communication over  
an H.323 protocol; and

          an H.323 gatekeeper managing the H.323 terminal device over  
the H.323 protocol for performing protocol conversion between the PBX  
protocol and the H.323 protocol, wherein:

10           the IP-PBX, the IP terminal device, the H.323 terminal device  
and the H.323 gatekeeper are connected to the same IP network;

          the IP terminal device is a wireless base station; and

          the H323 terminal device deals with supplemental service  
functions compliant with H450 by the ITU-T recommendation.

5.   An IP network system as claimed in claim 3, wherein the  
H.323 gatekeeper:

          receives from the H.323 terminal device a service-use request  
message compliant with the H450;

5           converts the protocol of the received message from an H450

protocol to the PBX protocol to transmit the message to the IP-PBX;

receives from the IP-PBX a service-use response message compliant with the PBX protocol; and

converts the protocol of the received message from the PBX  
10 protocol to the H450 protocol to transmit the message to the H.323 terminal device.

6. An IP network system as claimed in claim 4, wherein the H.323 gatekeeper:

receives from the H.323 terminal device a service-use request message compliant with the H450;

5 converts the protocol of the received message from an H450 protocol to the PBX protocol to transmit the message to the IP-PBX;

receives from the IP-PBX a service-use response message compliant with the PBX protocol; and

converts the protocol of the received message from the PBX  
10 protocol to the H450 protocol to transmit the message to the H.323 terminal device.

7. An H.323 gatekeeper connected via an IP network to a communication system employing a predetermined protocol other than the H.323 protocol, in compliance with an H.323 protocol, for:

managing an H.323 terminal device connected via the IP  
5 network; and

performing protocol conversion between the H.323 protocol and the protocol employed in the communication system to control voice communication between the H.323 terminal device and the communication system.

8. An H.323 gatekeeper as claimed in claim 7, for:

receiving from the H.323 terminal a service-use request message compliant with H450 by the ITU-T recommendation;

5       converting the protocol of the received message from an H450 protocol to the protocol employed in the communication system to transmit the message to the communication system;

receiving from the communication system a service-use response message compliant with the protocol employed in the communication system; and

10       converting the protocol of the received message from the protocol employed in the communication system to the H450 protocol to transmit the message to the H.323 terminal device.